ABSTRACT

OPTIMIZATION FIBRINOLYTIC PRODUCTION BY BACILLUS SPHAERICUS BM 9.1 IN TOFU WHEY MEDIUM

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Proteolytic enzyme is an enzyme that lysis proteins. Fibrinolytic enzyme is a specific enzyme that lysis protein called fibrin. Fibrinolytic enzyme used as a treatment for cardiovascular disease. Fibrinolytic enzymes lysis the thrombus formation comprising fibrin threads so that the thrombus rupture. Fibrinolytic enzyme can be produced from bacterial microorganisms. Bacillus sp known to produce a lot of fibrinolytic enzyme. Bacillus sp is a species of bacteria require a carbon source and as a nutritional nitogen. Tofu whey contain polimers that use by bacillus as a source of carbon and nitogen. Fibrinolytic and proteolytic activity are measured by skim milk medium and fibrin plate.

Tofu whey use as a medium to grow and produce fibrinolytic enzym by Bacillus sphaericus BM 9.1 The optimum cencentration of tofu whey as medium to grow and produce fibrinolytic enzym by Bacillus sphaericus BM 9.1 compare in four different concentration of tofu whey.

Keywords: optimization, Fibrinolytic enzyme activity, Bacillus sphaericus, tofu whey, concentration.